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of Transportation

**Federal Highway
Administration**

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Federal Transit
Administration

Program Review

Greensboro, NC Metropolitan Planning Organization

FINAL REPORT

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Executive Summary

Purpose

Pursuant to 23 U.S.C. (i)(5) and 49 U.S.C. 1607, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must certify jointly the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least once every four years. The Greensboro Urban Area Metropolitan Planning Organization (GUAMPO) is a TMA, a metropolitan planning organization (MPO) with a population of at least 200,000 as defined by the United States Census Bureau.

Methodology

The review consisted of a desk audit, a public comment session conducted on Wednesday, March 6, 2013, and an on-site review that was also conducted on March 6, 2013. The Federal Transit Administration (FTA) conducted an on-site review in advance of the FHWA on-site review on November 1, 2012. In addition to the formal review, routine oversight, such as attendance at meetings, day-to-day interactions, review of work products, and working with the MPO on past certification review recommendations and corrective actions provide a major source of information upon which to base certification findings. After the on-site review is complete, a report is written to document the findings.

In preparation for the Review, the GUAMPO and other review participants were provided a survey prepared by FHWA to determine which metropolitan transportation planning products and areas merited the most discussion during the on-site review.

Statement of Finding

The FHWA and the FTA find that the metropolitan transportation planning process substantially meets Federal requirements and jointly certify the planning process. The review identified noteworthy practices and recommendations.

Findings

The Federal Review team identified the following noteworthy practices and recommendations:

Noteworthy Practices:

- 1. The Triad area transportation conformity Interagency Consultation (IC) process is working exceptionally well. The Greensboro MPO, the Piedmont Authority for Regional Transportation (PART), and the other State/Federal agency partners are commended for their participation, involvement, due diligence, and timely**



completion of the 2035 Metropolitan Transportation Plan (MTP) update conformity determination process.

- 2. The MPO is commended on its early use of INRIX data in its Congestion Management Program (CMP).**

Recommendations:

- 1. It is recommended that FHWA increase and augment its involvement, participation, and communication with the MPO.**
- 2. It is recommended that the MPO account for and incorporate Moving Ahead for Progress in the 21st Century (MAP-21) requirements in the development of its next Unified Planning Work Program (UPWP).**
- 3. It is recommended that the Year of Expenditure (YOE) dollars be shown in the body of the MTP, not just in the appendix.**
- 4. It is recommended that the MTP be updated by March 2016 to include 2010 U.S. Census data.**
- 5. It is recommended that enhanced focus be given to the link between freight activities and economic development.**
- 6. It is recommended that the MPO further develop a financial plan for the TIP before the target deadline of June 30, 2013.**
- 7. It is recommended that performance measures be included in the Public Involvement Policy (PPP) to help determine its effectiveness.**
- 8. It is recommended that in addition to individual demographic maps, create one map all inclusive and therefore uses the same thresholds for all groups. This map should depict all EJ populations as well as all recently completed, existing, and planned projects.**
- 9. It is recommended that measures be identified for assessing transportation system equity, and to conduct quantitative analyses based on those measures.**
- 10. It is recommended that the MPO continue to advance its plan to use measured data such as travel time and travel speeds in place of modeled/estimated measures such as level of service (LOS) and volume to capacity ratio (V/C) to measure congestion.**
- 11. It is recommended that the MPO coordinate with the FHWA on future updates of the congestion management process.**



12. It is recommended that the MPO identify a process for adding local ITS projects to the Regional ITS Architecture.

Certification

The Greensboro Urban Area Metropolitan Planning Organization's (GUAMPO) planning process is certified for four years from the date of this Report.

Introduction

Purpose

The purpose of the Review is to assess the extent of compliance with the Federal planning requirements, to recognize noteworthy practices, to identify problem areas, and to provide assistance and guidance, as appropriate. The Review consisted of a series of discussions on a variety of transportation planning topics with State and local transportation officials directly involved in the highway and transit planning activities of the Metropolitan Planning Organization (MPO). The Review, which was held at the Greensboro Department of Transportation in City Hall, included a public involvement meeting on Wednesday, March 6, 2013, to provide the public an opportunity to offer comments on the MPO's transportation planning process. Ten individuals attended and provided comments (see Appendix D). This report contains the findings and recommendations of the Review Team.

Scope

Pursuant to 23 U.S. C. (i)(5) and 49 U.S.C.1607, the FHWA and the FTA must certify jointly the Federal metropolitan transportation planning process in Transportation Management Areas (TMAs) at least once every four years. A TMA is an urbanized area with a population greater than 200,000, as defined by the U.S. Census Bureau. Certification reviews generally consist of three primary activities: 1) an on-site visit; 2) review of planning products, both prior to, and during the Review; and 3) preparation of a Certification Review Report, which summarizes the Review and contains Findings, including Noteworthy Practices, Recommendations, and any Corrective Actions. Certification Reviews address compliance with Federal regulations; and challenges, successes, and experiences of the cooperative relationship between the MPO, State Department of Transportation (DOT), and Transit Operator in the conduct of the continuing, cooperative, and comprehensive (3C) metropolitan planning process. Joint FHWA/FTA certification review guidelines afford agency reviewers flexibility in designing the Review to reflect local issues and circumstances. Consequently, the scope of the Certification Review Reports varies from TMA to TMA.



Methodology

The FHWA North Carolina Division Office and the FTA Region 4 Office conducted a joint Certification Review of the Greensboro MPO's transportation planning process, which included a site visit on Wednesday, March 6, 2013. The Federal Transit Administration (FTA) conducted its on-site review on November 1, 2012. The Review was conducted in accordance with 23 CFR Part 450 and 49 CFR Part 613, which requires FHWA and FTA to review and assess jointly the transportation planning process for all transportation management areas (TMAs) at least once every four years. According to the 2010 Census, the Greensboro Urban Area Metropolitan Planning Organization (GUAMPO) contains a population over 200,000, which makes it subject to the TMA transportation planning requirements.

The MPO staff worked with FHWA staff to develop a schedule for the Certification Review process that was compatible with ongoing workloads and the meeting schedules for the Technical Coordinating Committee (TCC) and Transportation Advisory Committee (TAC). A desk audit of the MPO's planning documents was conducted prior to the on-site review. Responses to pertinent questions were provided and reviewed in advance of the on-site review. The preliminary documentation of the MPO's answers to the questions included in the certification process was available at all of the usual review locations, and on the MPO website. An email survey was provided to staff at the MPO, North Carolina Department of Transportation (NCDOT), and Federal review team members. Advertisements for the certification review were posted in all newspaper and public service announcement outlets. A public comment period was advertised and held between November 27, 2012, and April 5, 2013, as a part of the process for FHWA staff to receive comments on the MPO's performance.

The topics addressed in this report document the regulatory basis, current status, and findings. These terms are defined below.

Regulatory Basis – Defines where information regarding each planning topic can be found in the Code of Federal Regulations (CFR) and/or the United States Code (USC) – the “Planning Regulations” and background information on the planning topic.

Current Status – Defines what the Transportation Management Area (TMA) is currently doing with regard to each planning topic.

Findings – Statements of fact that define the conditions found during the review which provide the primary basis for determining the corrective actions, recommendations, and/or noteworthy practices, if any, for each planning topic.

Noteworthy Practice – a process or practice that demonstrates innovative, highly effective procedures for implementing the planning requirements. Examples include elements addressing items that have frequently posed problems nationwide, and significant improvements and/or resolution of past findings.



Recommendation – Addresses technical improvements to processes and procedures that while somewhat less substantial and not regulatory, are still significant enough that FHWA and FTA are hopeful that State and local officials will take action. The expected outcome is change that would improve the process, though there is no Federal mandate, and failure to respond could, but will not necessarily result in a more restrictive certification.

Corrective Action – Indicates a serious situation that fails to meet one or more requirements of the transportation planning statutes and regulations, thus seriously impacting the outcome of the overall planning process. The expected outcome is a change that brings the metropolitan planning process into compliance with a planning statute or regulation; failure to respond will likely result in a more restrictive certification.

Team Members

The Federal Review Team consisted of the following individuals:

- Ms. Unwanna Dabney, Planning & Program Development Manager, FHWA, NC Division
- Ms. Loretta Barren, Transportation Planner, FHWA, NC Division
- Mr. Eddie Dancausse, Air Quality Specialist, FHWA, NC Division
- Ms. Lynise DeVance, Civil Rights Program Manager, FHWA, NC Division
- Mr. Joe Geigle, Congestion Management Engineer, FHWA, NC Division
- Mr. Bill Marley, Transportation Planner, FHWA, NC Division
- Ms. Myra Immings, Community Planner, FTA, Region 4

Other participants consisted of staff from the Greensboro Urban Area MPO, the City of Greensboro, and the North Carolina Department of Transportation (NCDOT), including:

- Mr. Tyler Meyer, Greensboro MPO
- Ms. Lydia McIntyre, Greensboro MPO
- Mr. Craig McKinney, Greensboro MPO
- Mr. Wayne C. Davis, NCDOT
- Mr. Michael Abuya, NCDOT

General Comments

At the beginning of the review, the review team provided a short overview of the Moving Ahead for Progress in the 21st Century (MAP-21) legislation to MPO staff. A power point presentation



was shown, which is available at www.fhwa.dot.gov/map21. Emphasis was placed on the performance management report that is due within four years followed by every two years thereafter. The MAP-21 themes of job creation, economic growth, safety, reduction in funding categories, and project streamlining were discussed. The need for MPOs to conduct performance management through structuring their plans to help support and achieve the seven national goals in MAP-21 was also discussed.

The impact of Federal sequestration was discussed. Very little impact is expected to the Federal-aid Highway Program due to the gas tax funding our program. The FHWA focused on the renewal of the Continuing Resolution (CR), which expired March 27, 2013.

Subsequent to this overview, there was a question and answer session in which MPO staff asked questions of the review team and offered comments on the federal metropolitan transportation planning requirements and processes. The MPO staff and NCDOT offered a number of comments and observations during the review. Specifically:

- The MPO stated that technical assistance is always welcome.
- The NCDOT stated that they appreciate the MPO's cooperation in the transportation planning process.
- The MPO staff would like to know as soon as possible what new performance based planning requirements will be required of them per the MAP-21 legislation.
- The MPO requested increased and augmented FHWA involvement, participation, and communication with the MPO.

The MPO is concerned that there are more requirements but not as much funding. The MPO is attempting to deploy its resources more effectively to accomplish the goals of MAP-21. It was noted that the addition of a planner in each of NCDOT's 14 Division offices should augment and help to facilitate the MPO's planning process.

Recommendation:

- 1. It is recommended that FHWA increase and augment its involvement, participation, and communication with the MPO.**



Greensboro Urban Area Metropolitan Planning Organization (GUAMPO) Background

Current Status

The Greensboro Urban Area Metropolitan Planning Organization (GUAMPO) manages the transportation planning process required by Federal law. The MPO plans for the area's surface transportation needs, including highways, transit, bicycle, and pedestrian facilities. The priorities of the MPO include: 1) promoting the safe and efficient management, operation, and development of transportation systems; 2) serving the mobility needs of people and freight, 3) fostering economic growth and development; and 4) minimizing the negative effects of transportation, including air pollution.

The MPO serves the City of Greensboro, much of unincorporated Guilford County, and the towns of Oak Ridge, Pleasant Garden, Sedalia, Stokesdale, and Summerfield. Burlington, Gibsonville, Whitsett, and nearby unincorporated areas are served by the Burlington-Graham MPO. High Point, Jamestown and unincorporated areas are served by the High Point Urban Area MPO.

The Greensboro Department of Transportation (GDOT) is the Lead Planning Agency (LPA) of the MPO, while the City of Greensboro, Guilford County, and the North Carolina Department of Transportation (NCDOT) are member agencies. The Transportation Advisory Committee (TAC) is the MPO's Policy Board and is made up of the following officials:

- Four (4) members of the City of Greensboro City Council
- Two (2) members of the Guilford County Board of County Commissioners
- One (1) member of Guilford County's Small Incorporated Towns
- One (1) member of the North Carolina Board of Transportation
- The Federal Highway Administration NC Division Administrator, or his representative as an advisory, non-voting member

Each vote carries the same weight, and the voting structure aligns with population. A simple majority is required to conduct business. "Roberts Rules of Order, Newly Revised" designates procedures governing voting. Due to the State of North Carolina's new Ethics Law, some TCC members have taken on ex-officio, non-voting member status.

The Piedmont Authority for Regional Transportation (PART) and the Piedmont Triad Council of Governments have board members in common with the TAC.

The Technical Coordinating Committee (TCC) advises the TAC and is made up of staff from the following agencies:



- Greensboro Department of Transportation (GDOT)
- Greensboro Transit Authority (GTA)
- Greensboro Planning and Community Development Department
- Guilford County Planning and Development Department
- Piedmont Triad International Airport
- NCDOT (Division 7, Transportation Planning Branch, and Public Transportation Division)
- Piedmont Authority for Regional Transportation (PART)

The following operators of major modes of transportation are not currently members of the MPO:

- AMTRAK
- North Carolina Railroad
- Norfolk Southern Railroad
- Trailways Bus
- United States Post Office
- Guilford County Public Schools
- Colonial Pipeline
- Federal Express

The TCC provides general review, guidance, and coordination of the transportation planning process. The TAC is the MPO's policy board and has a key role in making decisions about public investment in transportation services, infrastructure, and planning within the region, and in communicating those decisions to the policy boards of its member agencies. All TCC and TAC meetings are open to the public.

The MPO designation from the 1970s remains in effect. The Memorandum of Understanding (MOU) was reviewed and updated in April 2010 to add small town representation and to comply with regulatory and statutory updates. No proposed changes to the MOU are envisioned at this time.



The MPO acknowledges the MAP-21 requirement for local transit operator(s) to be members of the TAC, believes they are currently in compliance, but will take steps to ensure inclusion of the Greensboro Transit Authority.

Metropolitan Planning Area Boundary (MPA)/Census

Regulation: 23 CFR 450.312(a):

The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum, the MPO boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.

Regulation: 23 CFR 450.314(a) and (d):

The MPO, the State, and the public transportation operator(s) shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. The responsibilities shall be clearly identified in a written agreement among the MPO, the State(s) and public transportation operator(s) serving the MPO, and if more than one MPO has been designated to serve an urbanized area, there shall be a written agreement among the MPOs, the State(s), and the public transportation operator(s) describing how the metropolitan transportation planning process will be coordinated to assure development consistent with metropolitan transportation plans and Transportation Improvement Programs (TIPs) across the MPO boundaries, particularly in cases in which a proposed transportation investment extends across the boundaries of more than one MPA. If any part of the urbanized area is a nonattainment or maintenance area, the agreement shall also include State and local air quality agencies.

Regulation: 23 CFR 450.321 (a):

The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum, the MPO boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.

Current Status

The MPO's Metropolitan Planning Area boundary (MPA), based on the 2010 United States Census, has been adjusted, was adopted by the MPO on July 21, 2012, and is awaiting approval by the Governor.

Portions of the Greensboro Urbanized Area are shared with the adjoining Burlington-Graham, High Point, and Winston-Salem MPOs. Local boundary agreements were negotiated, and are



complete as of January 2013. All of the City of Jamestown is under the purview of the High Point MPO. No funds are shared between the MPOs.

Possible future MPA expansions include areas to the north and northwest into Rockingham County. Factors in determining future expansions include population growth, business development, commuting patterns, land use patterns, and arrangements with neighboring MPOs. Member agencies follow proper protocol in implementing the metropolitan planning process.

Two agreements exist with the Piedmont Authority for Regional Transportation (PART); one for modeling and one for coordination.

The MOU does not need to be updated at the present time. No additional jurisdictions are expected to be added. The Prospectus is in the process of being updated.

There are no Federal Lands or Indian Tribal lands within the MPA.

Unified Planning Work Program (UPWP) Development/Regional Planning Agreements

Regulation: 23 CFR 450.308 and 23 CFR 420.111:

Sets forth requirements for each MPO, in cooperation with the State and public transportation operators, to develop a Unified Planning Work Program (UPWP) that documents planning activities, products, funding, roles, and responsibilities, and a timeline for the completion of each activity.

Current Status

The Greensboro UPWP is a product of a cooperative approach to development of the region's transportation program. Most of the work tasks and products in the UPWP are completed on time, despite the changing schedules and priorities of the various Federal, State, and local agencies.

The UPWP development process usually begins in late fall or early winter each year. The member jurisdictions of the MPO, transit agencies, and NCDOT are encouraged to identify projects, studies, or work tasks that need to be included in the UPWP for the upcoming fiscal year. The NCDOT Transportation Planning Branch and Public Transportation Division calculate and inform the MPO what Section 104(f) Planning (PL) and Section 5303 transit planning funds are available for programming. The total amount of planning funds plus the required 20% local match are then used in developing a City of Greensboro budget for the MPO staff to pay staff salaries and benefits, plus operations charges. The budget is then utilized to identify in general what types and how much work can be accomplished in the fiscal year. The work estimates are developed and reviewed by March. Once the draft UPWP has been reviewed by the member



jurisdictions in the MPO, it is sent electronically to NCDOT's Transportation Planning Branch and Public Transportation Division for review and comment. Any comments or changes are then incorporated into the draft UPWP, and a final UPWP is developed, reviewed, and approved by the TCC and TAC, usually in May. A final letter of approval is then provided to the MPO by NCDOT by July.

UPWP activities are developed, selected, and prioritized with the input of the MPO member jurisdictions. Staff identifies, selects, and prioritizes the work tasks in the UPWP that need to be and can be accomplished. Planning priorities facing the metropolitan area, and all metropolitan transportation and transportation-related air quality planning activities anticipated within the timeframe (one or two years), are typically included in the required narrative text for each work task.

The MPO stated that current PL funding is not adequate to fully implement all of the metropolitan transportation planning requirements. The City of Greensboro provides administrative support to the MPO. The MPO would like to be able to hire more staff, but cannot currently afford to do so. Professional development of MPO staff is funded largely through the administrative budget.

Work activities identified in the UPWP reflect a commitment to improve the transportation planning process. Examples include enhanced public involvement, Title VI and environmental justice, and town representation.

There has typically been some carry over balance from year to year of PL funds; however, this amount has generally diminished over time.

The current UPWP does not include a summary of the previous year's activities. However, such documentation is supplied in the year-end invoice to NCDOT.

The public is not generally involved in the development of the UPWP through a formal review process; however, they can comment on it at TCC and TAC meetings.

The UPWP accounts for performance measures through the execution of MTP and CMP updates, transportation needs studies, and transit and bicycle and pedestrian plans.

The MTP describes the MPO's vision while the UPWP identifies proposed activities to help achieve desired outcomes.

The MPO needs to analyze and evaluate where funds are being spent and why in order to more fully address and link to the vision and goals of MAP-21.

Members of the freight, non-motorized transportation, bicycle, pedestrians, and other modal interests are informed of and encouraged to participate in the development of the annual UPWP through their involvement in the MPO's various subcommittees.

The MPO is party to the following memorandums and agreements:



- Memorandum of Understanding, revised and adopted April 2010
- Memorandum of Agreement for Transportation Conformity, adopted 01/26/11
- Prospectus for Continuing Transportation Planning, adopted 12/11/01
- Memorandum of Agreement governing Travel Demand Modeling Services, adopted 03/19/03
- Memorandum of Understanding of Enhanced Regional Cooperation, adopted 02/26/04

The TCC serves as a consultative forum for discussion of responsibilities and the planning work program more generally. The MPO staff usually take the lead in the development of the MTP, TIP, UPWP, etc., and studies and work items on behalf of the MPO. Depending on the nature of the study, another part of the LPA organization such as GTA or Traffic Engineering may take the lead. Conformity-related projects are generally developed in coordination with the other Triad MPOs, NCDOT, and PART, with PART usually taking the lead coordination role.

Recommendation:

2. **It is recommended that the MPO account for and incorporate Moving Ahead for Progress in the 21st Century (MAP-21) requirements in the development of its next Unified Planning Work Program (UPWP).**

Public Transit Planning

Regulation: 49 USC 5303:

It is in the interest of the United States, including its economic interest, to foster the development and revitalization of public transportation systems, in acquiring, constructing, supervising, or inspecting equipment or a facility for use in public transportation, and to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes.

Current Status

The City of Greensboro Public Transportation Division (PTD) operates Greensboro Transit Authority (GTA) fixed route fleet by means of third party contract to Veolia. The fleet of (43)



fixed route buses is comprised of (20) 35-foot diesel vehicles (Orion) and (20) 35-foot diesel vehicles (Gillig). GTA also operates (4) diesel-electric hybrid vehicles. These buses serve (15) fixed routes in the metropolitan planning area including areas within the Greensboro city limits and extending to Jamestown (Guilford Technical Community College). The current operating budget is approximately \$22.5M. Unfunded transit needs have been identified (in the Metropolitan Transportation Plan update process) and are currently quantified at \$2.8M. GTA currently experiences a 26% fare box recovery rate.

GTA Fixed-Route Service: The fixed route service is provided along (15) routes and (5) connecting routes to ex-urban service including but not limited to service connection to Piedmont Regional Transportation Authority (PART). Most trips are either/both work trips and/or school trips. Operation is conducted Monday through Sunday with limited weekend service. Service extends over (231) route-miles for GTA general service and (49) miles for connector service. Current peak weekday service headways are 30-minutes and adult full fare was recently increased from \$1.30 to \$1.50. Current fixed route ridership is growing and is expected to continue moderate growth in 2013 reflective of strained economy and availability of FTA Job Access/Reverse Commute service. Further, GTA has made great strides in bringing Para-transit patrons into main line use of GTA fixed route service funded partially by FTA New Freedom program funding. Latest statistics indicate that GTA fixed-route service and Higher Education Area Transit (HEAT) service collectively provide 4.6M passenger trips annually.

SCAT Para-transit Service: Para-transit service is provided by (38) para-transit vans. Demand-responsive para-transit service level is currently measured as 220,000 passenger trips annually. SCAT accommodates certified-eligible riders with their companions and service animals. Deliberate effort is made to mainstream para-transit eligible riders through education and training programs; these programs have been notably well received in the Greensboro community, and reflect yet un-quantified savings in operating expenses. Para-transit trips average \$29/trip in actual costs. SCAT enjoys a low rate of trip-denial and a low no-show rate by its patrons. There is no incidence of no-show by the para-transit provider (noting that the allowable window of performance for pick-up of SCAT para-transit riders is one-half hour: 15-minutes prior to the desired pick-up time and 15-minutes after the desired pick-up time).

Higher Education Area Transit: 14 buses serve Higher Education Area Transit (HEAT) routes providing transportation to (7) institutions of higher learning in the immediate Greensboro area. This service is provided free to the rider, and is financially supported by student fees through interagency agreement between the schools and GTA/the City. There are currently (46) HEAT bus stops along (59) route-miles. Further information concerning HEAT is available by accessing the City's HEAT website at: <http://www.rideheat.com>.



MPO/Transit Interactivity Pursuant to Transit Planning: Transit interests are appropriately addressed in Metropolitan Transportation Plan (MTP), Unified Planning Work Program (UPWP), and Transportation Improvement Program (TIP) development. The update to the MTP was delivered to the local MPO board in January 2013, to be followed by submittal to FHWA with copy to FTA in March 2013. Currently, the MPO leads the effort to update the 2035 Plan. Conversely, the MPO is included and participates in GTA short range planning for transit culminating in the Transit Development Plan (TDP); the current five-year TDP was finalized in March of 2012. The MPO is involved in the development of the TDP in a secondary role. Two (2) transportation planners within City government work cooperatively with GTA transit planners to ensure that transit interests are addressed in the overall transportation planning and implementation process in Greensboro. Transit is represented in the voting structure of the MPO policy board.

Transit/Transportation Funding: The MPO and transit operator work together to ensure that FTA funding is appropriately programmed in the TIP/STIP and UPWP. The FTA Section 5303 funding is passed through from the MPO to the transit planners within the PTD. FTA Section 5303 funding is used for general transit planning while FTA Section 5307 funding is used primarily for preventive maintenance (with use for planning limited to planning associated with specific major projects such as the recently completed transit administrative facility). The transit agents do not pass through funds to the MPO for planning. FHWA Surface Transportation Program (STP) funds and Congestion Mitigation Air Quality (CMAQ) funds are routinely passed through to FTA for administration. Effective mechanisms including but not limited to Interagency Consultation Groups (ICG) and Statewide Interagency Consultation Meeting (SICM) are in place for Greensboro and other NC Transportation Management Area (TMA) coordination; both FTA and FHWA participate regularly in the ICG and SICM processes which examine CMAQ proposed projects in the context of air quality conformity. Differences between FTA and FHWA eligibility criteria pursuant to flexures of Surface Transportation Program capital funds are understood by both the transit operation and the MPO. FTA grant making is undertaken by Ms. Erica Jefferies and supervised by Ms. Elizabeth James of GTA in a consistently highly effective and efficient manner.

Public Involvement for Transit: Public participation for transit follows the parameters outlined in the current MPO Public Participation Policy; the plan was last updated in May 2012 and is deemed adequate by both FHWA and FTA, including provisions for addressing needs of environmental justice (EJ) at-risk populations, physically-challenged (visually-impaired, hearing-impaired and non-ambulatory) and cognitively-challenged riders. The recent update included, but was not limited to, augmentation of the Limited English Proficiency (LEP) accommodation techniques, opportunities and activities. The MPO has developed a “toolbox” of



hitherto successful strategies and types of activities; it has been determined that coupling transportation public outreach with other community events is effective. Similarly, it has been determined that outreach to neighborhood associations impacted by specific transit projects is effective. The best outreach vehicle for general planning purposes (such as MTP, UPWP and TDP development), however, appears to be formal presentations before elected/appointed boards representing impacted groups. GTA and the MPO collect written comments and transcribe orally-input comments into writing, and provide written feedback to each comment as a routine component to their public participation program activities. The transit operator observed that provision of food, childcare, and transportation to meeting is effective in promoting maximum participation; this is consistent with findings throughout the Southeast. The MPO uses an after-action debriefing methodology for effectively evaluating their public participation immediately after occurrence of specific events. FTA requested that the MPO try to expand this qualitative evaluation methodology to incorporate a means of quantification of effectiveness (apart from tabulation of numbers of public involvement/participation meetings, participants, events, etc.). The MPO does not in and of itself support a Speakers Bureau, but does enjoy robust support from City officials when public endorsement or explanation of the transit operation is needed.

Transit Marketing: GTA observed that most effective transit branding is accomplished without use of advertising by means of bus wraps. Instead, participation in community activities and generating GTA's own community activities, such as "GTA Fun Zone" and "Say 'Hi!' to the Hybrids" transit-orientation events has proven to be most successful. GTA uses traditional methods such as advertising on-board buses and printed media, such as general circulation newspapers responsive to English-speaking and Spanish-speaking populations, as a secondary back-up to its more imaginative and engaging public participation efforts. Both the GTA and MPO websites are complete and informative with respect to transit marketing. Advertising in local motion picture theatres has proven ineffective and was dropped from the repertoire of regular public engagement activities.

Civil Rights Pursuant to Transit: There has been one (1) civil rights complaint made against transit since the previous Planning Certification Review (PCR). This complaint concerned fixed-route service. Mr. Frank Billue, former FTA TRO-04 Civil Rights Officer (CRO) was instrumental in its resolution. Details on the substance of the allegation/complaint and its resolution are on file with FTA HQ CCR. No complaints have been registered concerning SCAT para-transit service. Full discussion of Civil Rights is deferred to the highways element of the PCR Report.

Air Quality Conformity Status/Change: FTA and FHWA along with the MPO participate regularly in the ICG and SICM discussions supporting transportation air quality management in



Greensboro. In light of the air quality exempt status of the preponderance of the transit projects in Greensboro, the PCR reviewers collectively agreed to undertake this discussion during the examination of highways interests; documentation on air quality conformity will be incorporated into the PCR element drafted by FHWA.

National Environmental Policy Act (NEPA) Concerns: NEPA compliance is not a major hurdle/obstacle for the MPO and/or transit agency. Good cooperation exists between these entities and FTA TRO-04 concerning determination of NEPA Class of Action and processing of documentation to findings by FTA. Water pollution issues appear to be the topic of concern in Greensboro, and initiation of closer cooperation between the MPO and transit agency and the Environmental Protection Agency (EPA) Region IV through FTA is warranted. NEPA documentation is produced both in-house at the MPO and by means of contracted design services in a satisfactory manner. The MPO and transit agency is encouraged to consult with FTA TRO-04 in order to streamline NEPA documentation, bring more NEPA documentation production in-house and thereby lower design contract costs when prudent in the future.

Transit Association, Metropolitan Planning Association, and Transportation University Research Center Interactivity: Both the transit agency and the MPO participate in both the annual conferences of the North Carolina Public Transportation Association (NCPTA) and the North Carolina Association of Metropolitan Planning Organizations (NCAMPO). Mr. Tyler Meyer, lead staff for the MPO, is currently the extremely effective President of the NCAMPO. Through Mr. Meyer's efforts and the efforts of Ms. Elizabeth James, lead administrator for the GTA, and others, high levels of interactivity are consistently achieved toward betterment of transit planning in Greensboro.

Federal Training and Information Sources: The MPO and transit agency participate in National Highway Institute (NHI) and National Transit Institute (NTI) course offerings. The MPO and transit agency report no unmet need in terms of curriculum currently available from NTI and NHI. The transit agency regularly participates in Triennial Review training seminars offered by FTA in TRO-04, and likewise reported no unmet needs in the curriculum established for that training. The MPO and transit operator reported the opinion that the FTA public website is not user-friendly largely owing to the penchant for moving data around within its context. The MPO and transit agency use FTA online webinar resources such as town hall meetings emanating from Washington and the Transportation Electronic Award and Management (TEAM) system training provided on a quarterly basis from TRO-04 in Atlanta.



Air Quality

Regulation: 23 CFR 450.322(l):

In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR Part 93).

Regulation: 23 CFR 450.322(e):

The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan.

Current Status

The Triad area transportation conformity Interagency Coordination process is working exceptionally well. The Greensboro MPO, the Piedmont Authority for Regional Transportation (PART), and the other State and Federal agency partners are commended for their participation, involvement, and due diligence in making this process a success. PART assists the Triad area transportation partners in the coordination of both the Metropolitan Transportation Plan (MTP) and transportation conformity determinations. PART coordinates the MTP and conformity meetings. They schedule meetings, draft meeting agendas and minutes, draft conformity determination reports, and populate the appendixes. PART also manages the Triad regional model for all of the Triad area MPOs. The Greensboro MPO is very diligent and self-starting when it comes to both the preparation and execution of their planning and conformity requirements. They ask the right questions, anticipate roadblocks, and work through problems and issues with minimal involvement or reminders from the Federal and State partners.

The Greensboro MPO currently has a conforming 2035 Metropolitan Transportation Plan (MTP) and a 2012-2018 Transportation Improvement Program (TIP). The United States Department of Transportation (USDOT) made a transportation conformity determination on the Greensboro MPO 2035 MTP update and the 2012-2018 TIP on March 6, 2013 (for the Particulate Matter (PM_{2.5}) and Carbon Monoxide (CO) standards).

The Triad area (Guilford and Davidson Counties) was designated for the PM 2.5 Standard effective on April 5, 2005, and due to improved air quality monitor readings was designated maintenance on December 19, 2011.

Work on the Greensboro MPO 2035 MTP update and transportation conformity determination is complete. The Triad area (including the Greensboro MPO) held a kick-off Interagency Consultation (IC) meeting for the transportation conformity process on March 23, 2012, that focused on the 2035 MTP update, transportation conformity schedule and conformity process



related tasks to be performed by the Greensboro MPO, and the IC agency partners. The Greensboro MPO updated their latest planning assumptions in January 2013.

Noteworthy Practice:

- 1. The Triad area transportation conformity Interagency Consultation (IC) process is working exceptionally well. The Greensboro MPO, the Piedmont Authority for Regional Transportation (PART), and the other State/Federal agency partners are commended for their participation, involvement, due diligence, and timely completion of the 2035 Metropolitan Transportation Plan (MTP) update conformity determination process.**

Metropolitan Transportation Plan (MTP)/Planning Factors

Regulation: 23 CFR 450.322 and 306:

Development of a transportation plan addressing no less than a 20-year planning horizon. The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the eight (8) planning factors.

Current Status

The 2035 MTP update is complete. Boundary updates have been settled with the adjoining MPOs. The Update is written so as to be more reader-friendly, especially with regard to organization of its components.

The MPO is considering linking Problem Statements in the Comprehensive Transportation Plan (CTP) to the MTP to provide more detailed environmental information from planning and the National Environmental Policy Act (NEPA).

Development of the MTP is a collaborative process with adjoining MPOs. More emphasis was placed on freight during the current MTP Update. The MPO used a consultant and shared costs. They also conducted a freight survey and in the future are considering surveys for modeling freight movements. The environmental mitigation portion of the MTP Update garnered robust comments from the Environmental Protection Agency (EPA), Division of Water Quality (DWQ), and the United States Fish and Wildlife (USFW).



The MPO identifies transportation and services to determine which projects should be included in the MTP through evaluating deficiencies in the transportation system, gathering project specific studies, reviewing community needs, and requesting and determining the feasibility of obtaining funding for them over the horizon year timeframe.

The metropolitan transportation planning factors are incorporated into the products of the process, and serve as a basis for criterion used for identifying projects in the MTP and TIP. The UPWP contains tasks that include collection of data and analysis.

Geographical mapping of projects is underway that links property owners to projects, thereby fulfilling a public request for more available information.

The MTP is supported by a comprehensive and inclusive public involvement effort. The public involvement process complies with Title VI and the Executive Order on Environmental Justice.

The MTP is coordinated with the Triad Regional Demand Model for purposes of Air Quality Conformity, and contains horizon years of 2015, 2025, and 2035.

Transportation projects undergo review and prioritization within the MPO, and are submitted to the NCDOT for inclusion in the Strategic Prioritization Process (SPOT) for the 5 and 10 year Work Program, which includes the TIP.

With the adoption of the Complete Streets policy by the North Carolina Board of Transportation (BOT) and the incorporation of bicycle and pedestrian accommodations in the road cross-sections, all projects other than freeways now have a multi-modal cross-section.

Public involvement is incorporated in the development of the MTP via the following means: 1) implementation of the Public Participation Plan; 2) public notices via email, posters at public sites and on buses, and the MPO website; 3) public meetings at transit accessible sites; and 4) documents available at public sites.

NCDOT Transportation Planning, the NCDOT Division 7 Office, the Greensboro Transit Authority, and Piedmont Authority for Regional Transportation have been integrally involved in the evaluation of the existing MTP, and in updating the plans and projects.

Distribution of impacts to different socioeconomic and ethnic minorities is identified and measured through various means. Block group data from the 2010 and 2000 United States Census was used to establish areas of low-income and minority population concentration. African-American, Hispanic, Asian, American Indian, low income families, and low English proficiency populations were identified. Percentages were calculated for each block group, and block groups were tagged with percentages equal to or greater than the County percentages. Thematic maps were also created to reflect these data.

MPO staff coordinates closely with their NCDOT Transportation Planning Branch (TPB) coordinator, and communicates with other NCDOT departments including Program



Development and the Public Transportation Division. They are also actively involved in the development of the statewide transportation plan, and reviewed it in preparation of the MTP update.

Land Use and Livability

The MPO strives to integrate land use and transportation planning in a variety of ways. Projects already in the MTP and CTP are mapped and factored into land use recommendations. New transportation improvements are identified and incorporated into future transportation plan updates.

The MTP includes an extensive Bicycle and Pedestrian section. The MPO also designates a percentage of federal funding at the MPO level for bicycle and pedestrian projects. They submit bicycle/pedestrian projects through the Strategic Prioritization on Transportation (SPOT) process for inclusion in the TIP, and set aside a certain amount of federal funding at the MPO level for stand-alone bicycle/pedestrian projects.

The MPO's bicycle and pedestrian outreach is less robust recently than in previous years due to loss of staff; however, a Bicycle/Pedestrian Committee, which included members from "*Bicycling in Greensboro*," was formed to drive the Bicycle/Pedestrian part of the MTP Update. The MPO will decide the role of the Committee once the Update is complete. The MPO does request bicycle and pedestrian accommodations for all roadway projects where feasible. Sidewalk needs are assessed in part through identification of bus stops without sidewalks. The new GTA transit facility is Leadership in Energy and Environmental Design (LEED) certified. The MPO also supports greenway maintenance and expansion with federal funding.

To establish a link between the MTP and land use plans within the region, the MPO collected and created a composite land use plan. Design concept and scope of all existing and proposed major transportation facilities includes the following: 1) funding type, 2) project type, 3) limits, 4) length, 5) existing/future lanes, 6) functional classification, 7) bicycle/pedestrian accommodations, 8) regional significance, and 9) exempt status.

The Piedmont Triad Region, through PART, is currently involved in a three-year Piedmont Triad Sustainable Communities Regional Planning Grant project, branded *Piedmont Together*. It is funded by a Housing and Urban Development (HUD) Grant and coordinated by regional transportation and planning organizations. Project themes are jobs, housing, and transportation. The project includes 13 counties. The goal is to plan a more resilient future for the region. Socioeconomic data gleaned from the project will be used to supplement the socioeconomic forecast update for the next transportation model update. The Lead Planning Agency (LPA) for the MPO has a Community Sustainability Council and has encouraged energy conservation by conducting audits. PART continues to encourage car and van pooling or other alternative modes of travel. Linking sustainability to the planning process may be a challenge for the MPO.



Freight

The MPO considers and evaluates land use and freight-oriented developments within its metropolitan planning boundary. The involvement of the freight community is an ongoing and collaborative process. Between May 13 and June 7, 2010, the Piedmont Roundtable for Logistics and Distribution assisted with the distribution of a Piedmont Triad Motor Carriers Survey. Over 150 invitations were mailed although only twenty-one participants attended, twelve of whom were from the same company. Insofar as the Piedmont Triad region is attempting to become a logistics hub, this survey was timely and productive. The emerging Federal Express hub at Piedmont Triad International Airport, construction of the Heart of the Triad business and industrial park, and the completion of several Interstate loop highways and the I-73/74 Congressionally-designated high priority corridors all support this logistics endeavor.

Additional consideration needs to be given to freight planning, especially as it pertains to economic development. The MPO advocated for more freight points in the scoring model of the Strategic Prioritization on Transportation (SPOT) process.

Coordination between land use plans and future freight-related development needs are addressed through the identification of existing and future industrial collectors as part of a future update of the Collector Street Plan. It requires, through the development process, construction of industrial collectors consistent with plan recommendations.

The MPO collects and utilizes freight-related data through the use of classification traffic counts and external station studies. This information is also used in model development. The Piedmont Triad Regional Model Team is also formulating a plan to collect traffic data to support these purposes.

No freight professional development capacity building or training exercises have been held within the planning area.

The MPO hired Piedmont Logistics to write a freight logistics report that was used to develop the freight chapter in the MTP Update. The report identified the opportunity that the Triad region has to become a focal point for freight logistics and infrastructure. It identified key projects to this end.

Financial Planning

The MTP is based on reasonably expected financial resources over the life of the MTP, and identifies other funding mechanisms where a shortfall exists. The MTP uses the best available data provided by NCDOT projections based on the State Transportation Improvement Program (STIP) and other State funding sources. The MPO attempts to anticipate future funding that may be available through new programs such as the Mobility Fund or other public/private opportunities. For the MTP Update, trend analysis was used, project costs were updated, and available State and Federal revenues were estimated. Revenue and costs are posted in actual



dollars. *(One of the appendixes to the MTP contains Year of Expenditure (YOE) dollars. Project costs follow NCDOT's inflation factor of 4% after the first four years.)*

Financial information is developed in cooperation with NCDOT, GTA, and PART. Each source is defined including level of funding per source along with a chart showing the various funding sources by horizon year. The approaches to forecasting future revenue are documented in the 2035 MTP. Revenues are forecast by source, and the MTP document provides the assumptions for each. The current MTP was developed under the Safe Accountable Flexible Efficiency Transportation Equity Act – A Legacy for Users (SAFETEA-LU); the MTP Update will include new funding sources available in MAP-21.

Where appropriate, new revenue sources are identified in consultation with the MPO partners (NCDOT, City of Greensboro, FTA, PART, and Guilford County). Typically, such sources would be identified in a plan, a policy, a forecast, or a proposal from a member agency. For example, the MTP financial plan involves a review and consideration of the NCDOT's current long range revenue forecast. However, this forecast mainly concerns extrapolating existing revenue streams into the future. No regional or local sales taxes for transit are assumed, although they are discussed as future possibilities. The 2035 MTP documents the current assumptions for each revenue source.

To ensure the TIP financial plans are consistent with the STIP, the MPO requests the most recent version of the STIP when updating the TIP. Staff also reviews NCDOT Board of Transportation (BOT) agenda items.

The MTP process typically includes a review of project cost estimates obtained from NCDOT. MTP projects that are not yet in the TIP have their project cost estimates updated. Such estimates are revised in connection with any scope changes. MTP projects that are in the TIP have their costs reviewed and updated based on TIP cost changes. Where warranted and in consultation with NCDOT, TIP cost assumptions may be revised for projects where the TIP estimate appears outdated.

The MPO follows NCDOT's thresholds for determining an amendment versus an administrative modification.

Project consistency between the TIP and MTP is established at the outset. The consistency of the financial plan is a function of that. The MTP is developed based on a close review of assumed TIP reviews, projects, and program details.

The MTP is made available to the public through the MPO's tiered Public Participation Policy (PPP), its web site, and via printed material in the MPO's office.

The MPO's financial plan is included as an element in the overall MTP. Available financial resources are listed and described in the TIP, and are incorporated into the MTP. New revenue sources for the MTP and TIP are also noted and described. All potential new revenue sources are identified via research through the City's Budget office, NCDOT's Program Development



and Transportation Planning Branches, Division 7, on the internet, and through interactions with other MPOs around the state and country.

Assumptions and data sources for each revenue source are documented in the financial plan primarily in large spreadsheets and tables with text explaining the assumptions and data sources. A set of financial assumptions and calculations are established that guide the general approach to forecasting future revenues, and are included in the plan. All revenue figures cover consistent timeframes and fiscal years, and consistent dollar values are used and defined.

The MPO consults with both NCDOT and the City's Engineering Staff to generate the latest project cost estimates. The MPO consults with various NCDOT departments and divisions and the City's Engineering and Inspections Department staff to ensure that the TIP financial plans within the State are consistent with the STIP. The TIP and STIP are required to match, so they must be consistent with each other. NCDOT has provided tables of expenditures by funding categories for the past 20 years or more, which assist in preparing conceptual project estimates. Data are adjusted for time (schedule), location, and other project specific conditions on an as needed basis. Generally, an amount of 10-20% is used for contingencies when estimating a project cost. The MPO uses the TIP conceptual cost estimate in developing the MTP when it is known. Sometimes, similar project types will assist in developing conceptual cost estimates. Usually, when the TIP is being generated, there are comparisons of older estimated figures with current ones. Estimates are sometimes updated when the scope of the project changes significantly, or a significant change in the delivery of the project is anticipated. When new estimates are known, they are updated on an ongoing basis as project development progresses.

NCDOT provides the MPO trend analysis data covering the past 27 years when working in cooperation with the MPO to develop its TIP. Ratios and percentages are applied to base numbers and balanced against project cost estimates.

Financial analysis for roadways, transit, rail, bicycle, and pedestrian investments are included in the financial plan chapter of the MTP. Both existing and forecasted numbers for costs and revenues are evaluated.

NCDOT Powell Bill funds have been used for operations and maintenance of the transportation system, and are distributed twice a year.

Environmental Mitigation

For the 2035 MTP, the MPO, in consultation with PART and other Triad MPOs, developed a resource agency contact list that includes agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. The resource agencies were contacted during development of the plan and later when a draft plan was available.

A better understanding of resources that need to be avoided or impacts minimized has resulted from better estimating potential environmental mitigation activities, and from building upon the



existing consultation process. Outreach activities primarily during the MTP development via email and telephone calls have been used to consult with Federal, State, and local agencies.

Location and condition of environmental features that might be affected by proposals outlined in the MTP include hazardous waste sites, endangered species, 303D listed streams, wetland inventory, historic properties, and farmlands. MPO staff reaches out to agencies and requests sources of data and review of proposals in the environmental section of the MTP.

The Plan includes mapping with projects and environmental factors and a table with impact areas and potential mitigation measures. As part of the consultation process, resource agencies can review the proposed mitigation measures in the MTP and recommend additional mitigation measures that may be needed.

The Environmental Mitigation Section of the MTP focuses on linking the environment with planning. Geographic Information System (GIS) layers were analyzed using data from the NC One mapping resource. The MPO assigns staff to a Merger Team to review project scoping.

Safety and Security

The safety planning factor is considered in the MPO's planning process and is applied in a number of ways

The Greensboro MPO and NCDOT work collaboratively in developing safety goals, objectives, performance measures, and strategies for the urban area.

The MPO follows the Strategic Highway Safety Plan (SHSP) process closely as funding can be provided through the TIP. Goals and objectives are taken directly from the SHSP to reduce the number of fatalities, and to decrease the economic impact from highway-related accidents. As projects are developed, elements of the SHSP are incorporated. Coordination with NCDOT to create consistency between the SHSP and the MPO's safety projects has occurred.

The following safety-related goals and objectives have been identified:

- Increasing driver safety awareness
- Making walking and street crossing safer
- Making truck travel safer
- Working to reduce vehicle/train crashes
- Keeping vehicles on the roadway
- Minimizing the consequences of leaving the roadway
- Reducing head-on and across-median crashes



- Designing safer work zones
- Enhancing emergency medical capabilities to increase survivability

Safety is interwoven into the modal chapters of the MTP, and is a priority in project designs. Safety partners involved include the NCDOT Division 7 Area Traffic Engineer, law enforcement, and other departments within the City of Greensboro.

Safety performance measures are incorporated in the planning process mainly from traffic accident reports. The following metrics are used: 1) fatalities, 2) serious injuries, 3) crash rates, 4) crash hot spots, 5) collision inventories, 6) pedestrian injuries, 7) driver's age, 8) location, 9) Geographic Information System (GIS), and 10) roadway inventory data. Roadway design plans take into account accident patterns and how to reduce conflicts.

Safety is considered in determining which projects will be included in the MTP and TIP. NCDOT has funds specifically set aside for making safety improvements along roadways such as guardrails, rumble strips, enhanced lighting, turn lanes, better pavement marking and signs, etc. Highway Safety Improvement Program (HSIP) projects located within the MPO are included in the TIP. Most of these projects come from NCDOT and are routinely included in the TIP when project requests are taken.

Security is defined in the region as increasing the security of the transportation system for motorized and non-motorized users. Natural emergencies such as hurricanes and flooding are accounted for by the MPO. A plan has been developed by the Guilford County Office of Emergency Management.

Recommendations:

- 3. It is recommended that the Year of Expenditure (YOE) dollars be shown in the body of the MTP, not just in the appendix.**
- 4. It is recommended that the MTP be updated by March 2016 to include 2010 U.S. Census data.**
- 5. It is recommended that enhanced focus be given to the link between freight activities and economic development.**

STIP/TIP – Development/Approval/Amendment/Project Selection

Regulation: 23 CFR 450.324:

The MPO shall cooperatively develop a TIP that is consistent with the MTP and is financially constrained. The TIP must cover at least a four-year horizon and be updated at least every four



years. Additionally, the TIP must list all projects in sufficient detail outlined in the regulations, reflect public involvement, and identify the criteria for prioritizing projects.

Regulation: 23 CFR 450.332:

No later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall cooperatively develop and publish a listing of projects (including investments in pedestrian walkways and bicycle transportation facilities) for which funds under 23 USC or 49 USC Chapter 53 were obligated in the preceding program year.

Regulation: 23 CFR 450.334:

Self-certifications and Federal certifications are required for all Metropolitan Planning Areas (MPAs), concurrent with the submittal of the entire proposed TIP to the FHWA and the FTA as part of the STIP approval. The State and TMAs shall certify at least every four years that the metropolitan transportation planning process is being carried out in accordance with all applicable Federal requirements.

Current Status

Project prioritization and selection is developed in conjunction with the TIP cycle, generally centered on the development of the MPO Priority Needs List. This process involves staff analysis of project status (based on specified criteria), anticipated funding availability by source, consultation with the Program Development Branch and Public Transportation Division of the NCDOT, with GTA, and with PART. It continues with review and input from the TCC and the TAC, typically over a series of two or three meetings.

The MPO has developed criteria that closely mirror that of NCDOT's criteria used for prioritization. Transit Section 5307 funds are not sub-allocated, and STP funds are allocated to projects identified by the TCC and the TAC.

The Greensboro MPO TIP is typically developed every two years on a schedule that is compatible with STIP development. The MPO provides a prioritized list of projects to the NCDOT with relevant local data for inclusion in the Strategic Prioritization on Transportation (SPOT) process. The SPOT process involves a data driven quantitative scoring of projects based on project need, an MPO priority score, and an NCDOT Division priority score. The process focuses on three transportation project types: 1) mobility projects, 2) modernization projects, and 3) safety projects. Last year, the North Carolina State Legislature passed a law requiring each MPO to develop and approve a local prioritization process. The NCDOT SPOT Office is providing oversight of this legislation. The draft STIP is released and the MPO provides a local version of the document for the public's review using familiar language and street names. Both the NCDOT and the MPO provide opportunities for the public to make comments on the draft STIP/TIP, and public hearings are held.



The MPO stated that the TIP development process has improved significantly primarily due to the SPOT process and administrative modification procedures. The TCC and TAC appreciate this because they are more involved than in the past. The TIP amendment process is also working better now that NCDOT submits their proposed amendments with the MPO prior to taking their official action. Conversely, if the MPO wishes to modify or amend the TIP, it contacts NCDOT to discuss the proposal. The MPO provides background information on amendments to the TCC and TAC, and approval by resolution is requested. This documentation is forwarded to NCDOT for final approval. The MPO uses travel demand modeling to justify funding projects. The MPO stated that they have had success with their current project ranking and selection methodologies.

The MPO's project selection process begins with a call for projects from member jurisdictions via a Project Submittal Requirement Form. A project ranking process for highways was developed by the MPO that closely mirrors that used by NCDOT. It focuses on congestion, safety, feasibility, intermodal and multimodal considerations, local funding, and land use compatibility. An initial list of 20 projects is then evaluated for need, readiness, and funding feasibility. They are then ranked using the MPO's prioritization process.

When the final STIP is released, the TIP must match it. Prior to release of the final STIP, if the TIP does not match the STIP, adjustments to funding and minor time changes may be required. The MPO follows the guidelines of the SPOT process and submits projects that are within the MTP for funding. Point assignments are based on joint consideration of the MPO and Division 7 to maximize the potential for projects to be included in the TIP.

The TIP contains all regionally significant transportation projects regardless of funding source within the five-year STIP Work Plan.

The allocation of STP-DA funds is done exclusively through the MPO with placeholder TIP assignments and amendments to the TIP as needed for different project types such as greenways, bicycle and pedestrian facilities, intersections or small roadway projects, and transit and enhancement projects. Ideally, the STIP matches the time horizons established by the MPO; however, funding priorities of the NCDOT are subject to change such as with the new emphasis on bridge and pavement rehabilitation, and the allocation of urban loop funds at the State level. Also, the general lack of funds for sub-regional projects means that many local projects slip into later horizon years with each successive STIP. There is a new commitment by NCDOT to provide a higher degree of certainty on project delivery within the first five years of the STIP.

The State DOT and public transit operators provide the MPO with estimates of Federal and State funds available for the metropolitan area; however, there is often a delay in this information. For example, the MPO had to wait for the draft Public Transportation portion of the STIP.

The NCDOT may ask the MPO to modify and/or amend the TIP based on project scope or time changes, and the MPO may modify or amend the TIP for time, project scope, and/or funding changes. The amendment is presented at one meeting of the TAC for information purposes, and



is generally brought back for approval at the following meeting. Resolutions and action items are sent to the NCDOT for final approval by the North Carolina Board of Transportation, or vice-versa.

Demonstration of fiscal constraint of the TIP has been difficult for the MPO. The NCDOT develops the STIP and provides the MPOs with their relevant TIP. With the exception of the STP-DA funds, the NCDOT controls the STIP/TIP program.

Recommendation:

- 6. It is recommended that the MPO further develop a financial plan for the TIP before the target deadline of June 30, 2013.**

Public Involvement/Visualization

Regulation: 23 CFR 450.316(a):

The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

Current Status

MPO staff did minor updates to the Public Participation Policy (PPP) previously adopted in 2007. The updated PPP was adopted by the MPO May 24, 2012, and was posted for a 45-day public comment period during development. Prior to the public comment period, the draft plan was reviewed and commented on by the TCC and the TAC.

The goals of the public involvement program are to provide timely notice, education, and information to the public regarding planning activities, and providing the public reasonable opportunity to share views with decision-makers. It also affords citizens the opportunity to have their views considered and receive responses where appropriate. The MPO staff uses a Public Participation Checklist and Reference Guide when developing the MTP, TIP, etc.

No formal process currently exists for evaluating the effectiveness of the plan, except through surveys, sign-in sheets, and visual scans of participants to gauge the effectiveness of public events.



Traditionally underserved communities are provided for in the MPO's public involvement process through newspaper advertisements in minority targeted newspapers, references to Limited English Proficiency (LEP), and the need to translate documents. Special strategies such as providing food or child care during meetings are also considered.

The MPO records public comments received when appropriate. The comments are also shared with the TCC and TAC members.

The MPO coordinates with NCDOT and with Division 7 on specific projects. MPO staff also attends the project meetings. MPO staff provides local concerns or information during merger and project review meetings.

The MPO works closely with the NCDOT when public involvement events are held within the MPO to schedule convenient and appropriate venues. The MPO assists in advertising the meetings and attends all events sponsored by NCDOT. The MPO documents its consideration and response to public input.

A three-tier approach was developed for implementing the public participation goals. Some minor items are performed administratively with limited public involvement; these do not require a formal public involvement process outside the regular meeting structure of the MPO. Residents may attend and speak at each TAC meeting upon recognition by the TAC Chair, who may impose a reasonable time limit for speakers.

Methods and venues that are successful continue to be a part of the MPO's ongoing public outreach, while activities that generate low turnouts have been minimized.

The MPO staff works to make the language and concepts in all of its documents more readable and accessible to the public.

The MPO has found that piggybacking on other meetings yields successful public input and interaction.

The public involvement process demonstrates explicit consideration and responsiveness to public input received during the planning and program development process through receipt of both written and oral comments. The comments are recorded verbatim and provided behind a comment summary that summarizes and groups comments as appropriate, and provides MPO responses to all distinct comments. These are typically presented as an appendix to the document, and are presented to the TCC and TAC during the decision making process.

The MPO routinely attends realtors' meetings. The MPO created a folded placard and a bookmark describing its role in the transportation planning process.

The MPO's public involvement process is coordinated with that of NCDOT. The MPO highlights any statewide plans, programs, and workshops that are available for the public. The MPO staff attends all statewide events held within a reasonable distance.



Visualization

The MPO employs visualization techniques in its public involvement process to reinforce its planning process. Reports, power point presentations, maps, creative advertisements, post cards, and posters are used. Posters are used on buses and placed in recreation centers and other public venues. The MPO's public participation plan also recommends the use of photographs, graphic displays, and renderings. In addition, the MPO routinely engages television, radio, and newspaper media in attempts to run special stories on transportation.

Recommendation:

- 7. It is recommended that performance measures be included in the Public Involvement Policy (PPP) to help determine its effectiveness.**

Title VI and Environmental Justice

Regulation: 23 CFR 450.316(a)(1)(vii):

Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services.

Title VI of the Civil Rights Act of 1964:

No person in the United State shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Environmental Justice Executive Order 12898:

Each Federal agency shall make achieving environment justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Current Status

Demographic Profile

The Greensboro MPO has a comprehensive demographic profile that contains excellent graphics. The graphics are very clear, attractive, and user-friendly. The MPO mapped low-income populations as well as its four largest minority populations individually: African American, Hispanic, Native American, and Asian. The MPO also identified and mapped areas within the MPO boundaries that had significant Limited English Proficiency (LEP) populations. The MPO



used 2010 block group census data for identifying minorities. However, 2010 data was not available for low income, and therefore 2000 census data was used instead. Any group whose population was greater than the percentage for Guilford County was flagged for mapping. The MPO also plotted recently completed, existing, and planned projects against the mapped demographic data.

It was noted that the mapping for each of the various Environmental Justice (EJ) populations used different thresholds to depict the distribution of each particular population. While these thresholds may be helpful for internal EJ analyses, they can be a bit misleading visually to the public. This is due to the use of very small thresholds for certain populations which therefore make those populations look much larger than their actual size in comparison to other populations. As recommended during the last certification review in 2009, in addition to the individual maps, the MPO should create one map that is all inclusive and therefore uses the same thresholds for all groups. This map should depict all EJ populations as well as all recently completed, existing, and planned projects. This will provide a one-stop overall visual of the minority, low-income, and LEP makeup of the MPO as well as provide a starting point for identifying which projects will impact/have impacted an EJ population.

With regard to analyzing transportation system equity, the MPO has not conducted any quantitative analyses since the last certification review. Per the 2009 review, the MPO did conduct commuter travel time analyses using travel time bands. As stated in the 2009 certification review report, to ensure that both positive and negative impacts of transportation projects are equitably distributed, the MPO must be able to identify those impacts and then compare the impacts on EJ populations with the impacts on non-EJ populations. It is therefore recommended that the MPO identify measures for assessing transportation system equity and conduct quantitative analyses based on those measures. To determine which measures are best suited for the MPO, cues can be taken from community feedback and needs assessments.

Planning Process

The MPO considers Title VI and environmental justice in its planning process through the incorporation of a section on environmental justice in its MTP. The MTP also contains a Highway Project Impact Matrix which considers project impacts on each of the various EJ populations along with impacts on the natural and social environments. It should also be noted that the MPO recently developed a formal Title VI policy statement both in English and Spanish. The review team suggested that the policy statement be placed on the MPO's website. With regard to identifying the needs of EJ populations, the MPO has not specifically conducted any major needs assessments; however, staff indicated that they make use of area plans prepared by the city's Community and Economic Development section to help identify transportation needs. The MPO should consider conducting periodic area-wide needs surveys of the MPO area.

Public Involvement

The MPO's Public Participation Plan, which was recently updated in May 2012, uses a tiered approach to outreach based on the severity of expected impacts from a transportation project



or activity. The plan contains strategies that are to be used for all populations; however, specific EJ strategies are also noted throughout. The MPO's efforts at engaging minority and low-income citizens have primarily consisted of the use of a wide variety of media outlets including African American and Hispanic newspapers, an African American oriented radio station, a newsletter, and an email list distribution with over 3,000 addresses. Other examples of efforts include direct mailings, distributing notices at recreation centers, placing notices on buses, the translation of portions of the TIP into Spanish; and regularly speaking with realtors.

As a supplement to the Public Participation Plan, the MPO has also developed an LEP Plan which was adopted in February 2012. The LEP Plan identifies the primary languages spoken within the urban area boundaries and establishes a policy and structure for insuring input into the decision-making process for those with limited English proficiency. The plan has determined that Spanish and Vietnamese are the two most common languages spoken other than English.

The MPO indicated that it does not have a process in place to routinely evaluate its public involvement strategies; however, the MPO does consider things such as the level of attendance at public meetings, website usage statistics, and the quantity of comments received to evaluate the effectiveness of their efforts. Additionally, the public is welcome to submit comments on the MPO's Public Participation Plan at any time.

Recommendations:

- 8) It is recommended that in addition to individual demographic maps, create one map all inclusive and therefore uses the same thresholds for all groups. This map should depict all EJ populations as well as all recently completed, existing, and planned projects.**
- 9) It is recommended that measures be identified for assessing transportation system equity and conduct quantitative analyses based on those measures.**

Congestion Management Process (CMP)/Management and Operations (M&O)

Regulation: 23 CFR 320:

TMAAs shall develop a CMP to address congestion through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities.



Current Status

The Greensboro MPO's Congestion Management Program (CMP) follows the 8-Step approach. It was updated prior to the MTP update. Performance measures were modified. The network in the CMP was identified via the travel demand management. INRIX data and shape files data for corridor analysis have been purchased. Bottlenecks have been identified and projects designed to alleviate congestion at these points. Collecting and tracking data remains difficult.

The effectiveness of the CMP is evaluated during each biennial report as the progress toward goals is measured, deficient segment data is updated with the latest information, the effectiveness of proposed projects and congestion management strategies is reviewed, and future initiatives are pursued. The CMP is also reevaluated during the MTP update process.

Consideration is given to examining traffic congestion conditions and problems on a regional basis since construction work, crashes, and other incidents along the Interstate highways, other freeways and expressways, and other major roads linking the entire Piedmont Triad in Winston-Salem and High Point may have impacts on congestion levels within the Greensboro MPO boundary, and vice versa.

The current performance measures in the CMP are Volume to Capacity Ratio (V/C) and Level of Service (LOS). These performance measures provide a generalized analysis of the urban area's roadway segments and allow for further data collection and analysis if needed. The goals and objectives of the CMP were derived from the goals within the MTP to effectively move vehicular traffic, expand public transportation, and reduce travel demand. The CMP does not currently utilize the regional traffic model or other tools outside of traffic counts and V/C and LOS analysis. As such, non-recurring congestion such as events, incidents, or weather are not accounted for in the current CMP.

The major congestion issue in the Greensboro Urban Area is vehicular; therefore, the main data source for the CMP is traffic counts. The first step in data collection is the Average Annual Daily Traffic (AADT) values provided by NCDOT. If the AADT value and the corresponding V/C ratio show a segment or corridor is congested, additional data collection is called for in the CMP if the segment or corridor contains signalized intersections. In this case, turning movement counts at signalized intersections and travel time/speed studies would be conducted to verify if there is an issue on the segment, or to show that level of service values and travel times and speeds are acceptable. This data collection and analysis allows for the evaluation of projects and proposed improvements as they are completed during the biennial report process.

The congested locations are all along NCDOT roadways such as I-40. Proposed improvements incorporate additional Intelligent Transportation System (ITS) Architecture.

The CMP has influenced the construction and implementation of non-single occupancy vehicle (SOV) projects by engaging the regional and local transit providers in goal-setting and planning



in an effort to both expand public transportation options and services, and to reduce travel demand (the intent of expanding public transportation).

Management and Operations

The MPO's MTP update includes Operations and Management (O&M) strategies proposed for Federal funding supported by specific goals and measurable objectives. Mechanisms for measuring performance of O&M goals and objectives are being developed as part of the MTP update. Current operating conditions are being assessed to form a baseline as a part of the MTP update.

Management and operations strategies are included in the CMP. The operations community has reviewed the goals, objectives, and strategies. The CMP is the mechanism by which they will be evaluated.

The Intelligent Transportation Systems (ITS) Regional Architecture contains projects that are consistent with the MTP and are included in the overall planning process. Multimodal approaches such as coordinated signal/bus pre-emption systems, dedicated bus way considerations, and/or Bus Rapid Transit (BRT) projects are being studied. The ITS Regional Architecture is linked to the planning process through the CMP.

Transit operations are routinely discussed with PART and GTA during MPO meetings.

The CMP network covers the MPO area and includes a modeled network of roads. Modes include roadway, bicycle, pedestrian, and public transportation. The MPO expects to expand the network with the collection of data for the evaluation of performance measures and seek out better sources of data.

The following performance measures are in place and are being used:

- Total percentage of miles of Interstate, freeways, principal arterials, minor arterials, and collectors resurfaced
- Miles of bicycle facilities constructed (bike lanes, edge lines, bike routes, shared use paths)
- Miles of sidewalks constructed
- Total number of bike related accidents
- Total number of pedestrian related accidents
- Number of total riders
- Average weekday boardings



- Number of park and ride lots
- Percentage of buses with bike racks
- Miles of sidewalk construction to serve bus stops
- Percentage average headway variance of all transit routes
- Average on time arrival
- Total number of safety related bus/rider incidents
- Total number of cameras installed

The MTP and TIP do not currently include a documented methodology for assessing the costs associated with maintaining and operating the existing Federal-aid transportation system. The MPO works with NCDOT and the City of Greensboro's Engineering and Inspections, and Field Operations Departments to assess the costs associated with maintaining and operating the existing Federal-aid transportation system.

The Greensboro Department of Transportation maintains a traffic signal system control room to monitor conditions on key arterials and at key intersections.

The MPO region does not currently utilize a Regional Concept for Transportation Operations (RCTO).

The MPO needs to identify a process for adding local ITS projects to the Regional ITS Architecture. In order for FHWA to authorize an ITS project, it must first be identified in the Regional ITS Architecture. While NCDOT has a process for adding or ensuring that projects are in the architecture, a federal funded locally administered ITS project may not have a similar process.

Noteworthy Practice:

- 2. The MPO is commended on its early use of INRIX data in its Congestion Management Program (CMP).**

Recommendations:

- 10. It is recommended that the MPO continue to advance its plan to use measured data such as travel time and travel speeds in place of modeled/estimated measures such as level of service (LOS) and volume to capacity ratio (V/C) to measure congestion.**



11. It is recommended that the MPO coordinate with the FHWA on future updates of the congestion management process.

12. It is recommended that the MPO identify a process for adding local ITS projects to the Regional ITS Architecture.

Consultation and Coordination

Regulation: CFR 450.316(b)(c)(d)(e):

The MPO should develop and document consultation procedures that outline how and when during the development of MTPs and TIPs, the MPO will consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including state and local planned growth, economic development, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities, as well the MPO should also include Indian Tribal Governments, and Federal Public Lands, if applicable.

Current Status

The consultation process for the MTP with the environmental and resource agencies was developed after a FHWA workshop that was held in 2007 to assist MPOs and NCDOT understand the expectation of the consultation process. The MPO worked with its adjacent MPO partners and PART to hold a regional workshop to identify resources and strategies for notification and consultation with local, State, and Federal agencies. The 2008 MTP was the first effort to develop a comprehensive list of agencies and resource groups to locate data, and create an overlay mapping system to compare MPO projects to identify natural, cultural, and agricultural resources, as well as hazardous conditions. The regional partners worked together to share information and mapping.

Agency consultation is obtained at key decision points in the planning and programming phases of transportation decision-making. The Historic Resources Commission, the Division of Air Quality of the North Carolina Department of Environment and Natural Resources, EPA, and all agencies that are consulted during Environmental Assessments (EAs) and NEPA projects are involved during the planning and development of MPO projects.

Agencies are informed by email and personal telephone calls when documents are in the draft or review state, and the agencies are part of the MPO continuous consultation and notification process through the bi-monthly TCC/TAC packets.

The Greensboro MPO's Senior Civil Engineer, who leads the MTP and TIP development, implements the consultation process and serves on the Air Quality Interagency Team.



Air Quality Conformity consultation is a direct feedback with questions posed by the environmental agencies and responses provided by the MPO with corrections to either the TIP or MTP documents, or further explanation of the discrepancies in language between the two documents. The response and coordination between the planning and design phase is iterative in the development of projects. All comments and responses become public record within the environmental documents and assist the MPO in refining its process. The MTP relies on the input of the environmental agencies to update the document with current data, policies, rulemaking, and other issues that may affect or conflict with the content and meaning of the plan.

The Statewide Interagency Consultation Meetings (SICM), as well as the TIP and MTP specific Interagency Consultation meetings held monthly during plan development and review, are well coordinated at the Federal, State, regional, and MPO levels. This process has been very successful in creating a team effort in working through the requirements of Air Quality Conformity. The MTP coordination on other natural and cultural resources is accomplished during the preliminary and draft reviews of the document.

Visualization techniques are used to assist agencies in understanding the transportation plan elements. The overlay maps incorporate all the projects within the time horizons of the MTP and show which resources may be affected by the projects. Any project which has multiple resources within the general corridor or alignment will be noted as having an environmental component in the project listing table. The overlays are at such a large scale that anything more concrete would be jointly identified during that process by the resource agencies, NCDOT, and the MPO.

The MTP is compared with State conservation plans and maps, and with inventories of natural and historic resources. The MTP projects are overlaid on the mapping of natural and historic resources culled from numerous sources on the NCOneMap, and other agency shared GIS files.

Action Plan

The Federal Highway Administration (FHWA) North Carolina Division Office will work with the Greensboro Metropolitan Planning Organization (MPO) and the North Carolina Department of Transportation (NCDOT) to address recommendations identified in this Report.



Appendix A

Certification Review Agenda

Wednesday, March 6, 2013

9:00 – 9:05	Introductions and Purpose of Certification Review
9:05 – 9:30	General Comments and Feedback Regarding the Planning Process
9:30 – 10:00	MAP-21 Overview *
10:00 – 10:20	Study Organization
	Agreements and Contracts
	Metropolitan Area Boundary
10:20 – 10:40	Air Quality
10:40 – 11:20	Metropolitan Transportation Plan (MTP) <ul style="list-style-type: none">• Environmental Mitigation• Financial Planning• Bicycle and Pedestrian• Freight• Livability/Sustainable Communities
11:20 – 12:00	Transportation Improvement Program (TIP) <ul style="list-style-type: none">• Approval• Amendments• Project Selection• Financial Planning
12:00 – 1:00	Lunch
1:00 – 1:30	Intelligent Transportation Systems (ITS)



- Management and Operations
- Congestion Management Program (CMP)
- Safety and Security

1:30 – 2:00

Planning Factors

2:00 – 2:15

Travel Demand Models

2:15 – 2:30

Self-Certification

2:30 – 2:45

Break

2:45 – 3:45

Public Involvement and Outreach

- Title VI and Related Requirements
- Visualization

3:45 – 4:15

FHWA/FTA Review Team Meeting

4:15 – 4:30

Presentation of Preliminary Findings

6:00 – 7:00

Public Hearing

*Aspects of MAP-21, Public Transit, and Consultation and Coordination will be discussed as appropriate throughout the Review



Appendix B

Review Findings

Noteworthy Practices:

- 1. The Triad area transportation conformity Interagency Coordination (IC) process is working exceptionally well. The Greensboro MPO, the Piedmont Authority for Regional Transportation (PART), and the other State/Federal agency partners are commended for their participation, involvement, due diligence, and timely completion of the 2035 Metropolitan Transportation Plan (MTP) update conformity determination process.**
- 2. The MPO is commended on its early use of INRIX data in its Congestion Management Plan (CMP).**

Recommendations:

- 1. It is recommended that FHWA increase and augment its involvement, participation, and communication with the MPO.**
- 2. It is recommended that the MPO account for and incorporate Moving Ahead for Progress in the 21st Century (MAP-21) requirements in the development of its next Unified Planning Work Program (UPWP).**
- 3. It is recommended that the Year of Expenditure (YOE) dollars be shown in the body of the MTP, not just in the appendix.**
- 4. It is recommended that the MTP be updated by March 2016 to include 2010 U.S. Census data.**
- 5. It is recommended that enhanced focus be given to the link between freight activities and economic development.**
- 6. It is recommended that the MPO further develop a financial plan for the TIP before the target deadline of June 30, 2013.**
- 7. It is recommended that performance measures be included in the Public Involvement Policy (PPP) to help determine its effectiveness.**



- 8. It is recommended that in addition to individual demographic maps, create one map all inclusive and therefore uses the same thresholds for all groups. This map should depict all EJ populations as well as all recently completed, existing, and planned projects.**
- 9. It is recommended that measures be identified for assessing transportation system equity, and to conduct quantitative analyses based on those measures.**
- 10. It is recommended that the MPO continue to advance its plan to use measured data such as travel time and travel speeds in place of modeled/estimated measures such as level of service (LOS) and volume to capacity ratio (V/C) to measure congestion.**
- 11. It is recommended that the MPO coordinate with the FHWA on future updates of the congestion management process.**
- 12. It is recommended that the MPO identify a process for adding local ITS projects to the Regional ITS Architecture.**



Appendix C

Public Notices



U.S. Department
of Transportation
**Federal Highway
Administration**

Public Hearing Notice Metropolitan Planning Organization 2013 Quadrennial Certification

March 6, 2013 at 6 PM

**Melvin Municipal Office Building (City Hall)
Greensboro City Council Chambers
300 W. Washington Street**



The Greensboro Metropolitan Planning Organization (GUAMPO) invites you to a public hearing to be conducted by the Federal Highway Administration regarding our transportation planning process.

This hearing is being held to provide an opportunity for interested citizens to comment on GUAMPO's transportation plans, programs and services and on how effectively they meet the transportation needs of the area. Anyone in need of special services may call 373-4368 one week in advance of the hearing and we will try to provide the needed assistance.

Unable to attend the hearing; you may submit written comments by April 5, 2013 to:

2009 MPO Certification
Greensboro Urban Area MPO or guampo@greensboro-nc.gov
PO Box 3136
Greensboro, NC 27402-3136





U.S. Department
of Transportation
**Federal Highway
Administration**



**CITY OF GREENSBORO
FOR IMMEDIATE RELEASE**

Contact: Jake Keys
Phone: 336-373-2105

***Federal Highway Administration to Conduct
MPO Certification Public Hearing***

GREENSBORO, NC (November 27, 2012) – The City of Greensboro's Department of Transportation, the lead planning agency of the Greensboro Urban Area Metropolitan Planning Organization (GUAMPO), invites you to a public hearing regarding the transportation planning process in the GUAMPO area. Representative from the Federal Highway Administration (FHWA) will conduct the hearing as part of a quadrennial certification review of the GUAMPO transportation planning process.

The public hearing will be held on March 6th beginning at 6:00 pm in the Greensboro City Council Chambers, Melvin Municipal Office Building, 300 West Washington Street.

The public hearing is being held to provide an opportunity for interested people to comment on GUAMPO's transportation plans, programs, and services and how effectively they meet the needs of the area. The GUAMPO planning area includes Guilford County, except for the Burlington, Gibsonville, High Point, Jamestown and Whitsett areas.

You are also welcome to submit written comments. Please submit any written comments by April 5, 2013 to:



U.S. Department
of Transportation
**Federal Highway
Administration**

Public Hearing Notice

Metropolitan Planning Organization 2013 Quadrennial Certification

March 6, 2013 at 6 PM

**Melvin Municipal Office Building (City Hall)
Greensboro City Council Chambers
300 W. Washington Street**

The Greensboro Metropolitan Planning Organization (GUAMPO) invites you to a public hearing to be conducted by the Federal Highway & Transit Administrations regarding our transportation planning process and services.

Please call 373-4368 should you need special assistance in order to attend.

Unable to attend the hearing; submit written comments by April 5, 2013 to:

**2009 MPO Certification
Greensboro Urban Area MPO
PO Box 3136
Greensboro, NC 27402-3136**



Appendix D

Public Comments

1. Mike Fox, NCDOT Board Member: appreciates cooperation from FHWA; has been a Board of Transportation member since 2010; TCC and TAC are outstanding; great public involvement
2. Mike Mills, Division 7 Engineer: echoed Mike Mills' comments; project prioritization process going well
3. Mark Brown, Mayor, Town of Summerfield: The Town of Summerfield is a relatively new town being incorporated in 1996. Within the last ten years, the Town, through citizen concerns and complaints, became more aware of the importance of our road network and needed upgrades to create a safer and well maintained environment for our motoring citizens.

As we interacted with the NCDOT over the years, we became aware of the highway planning and maintenance process and the work of the Greensboro MPO. The small towns in Guilford County including Summerfield, Oak Ridge, Stokesdale, and Sedalia felt that maybe our citizens were not getting the necessary consideration for our needs from our MPO representative.

We collectively approached the MPO expressing our concern and were warmly received. The MPO agreed to establish a seat at the table for a representative of the small towns. The towns appointed our one representative, and we feel that our needs and concerns are very adequately considered.

Our Greensboro MPO has worked and is working to increase drivability of our area with reconditioned roads, loops, and I-73. The Greensboro area is a well-established transportation hub for the State of North Carolina, and our rapidly improving road system will be important to the southeast region for the next century.

Our Greensboro MPO besides roads has greatly assisted us and the state with its interest in the Mountain to the sea Trail system whose Guilford County byways are currently being established. In closing, I cannot stress enough the satisfaction that the Town of Summerfield has with our Greensboro MPO and our State Department of Transportation District 7.



4. Kathleen Sullivan, Greensboro resident: has been a realtor in the area since 1995; appreciates the collaboration between the MPO and the NCDOT; brown bag lunches are held between the MPO and realtors; helps to inform citizens buying properties of the transportation plans.
5. Carla Strickland, Mayor, Town of Pleasant Garden: The small towns served by the MPO are pleased to now have a voting seat on the TAC. The MPO staff is responsive to the needs of the small towns and provides information, studies, support, etc. as requested. MPO staff attended and provided information to citizens and answered questions at the February 2012 citizens' informational meeting on the new US 421/Neelley Road interchange conducted by the NCDOT at Town Hall. MPO and NCDOT staff assisted the town in addressing and responding to a citizen petition to connect Ridgepoint Drive to Neelley Road. The MPO adopted a Resolution of Support for the Town's application for the NCDOT Bicycle-Pedestrian Planning Grant initiative. MPO staff assisted in trying to identify possible funding sources for a proposed greenway connector between Town Hall and the town athletic fields.
6. Scott Rhine, Executive Director, Piedmont Authority for Regional Transportation (PART): works in collaboration with Greensboro and adjacent MPOs (High Point, Winston-Salem, Burlington-Graham) on air quality and travel demand model issues; professional staff at Greensboro MPO.
7. Roger Bardsley, TCC member: 2006 Bicycle/Pedestrian Master Plan for MPO; 2010 Greenway Feasibility Study to link area communities; 2010 Stimulus funding for parking lot; 2011 STP-DA funds for a greenway tunnel in the Pleasant Garden Bicycle/Pedestrian Plan; TCC and TAC are a valuable forum for regional thinking, collaboration, and cooperation.
8. Robbie Perkins, TAC Chairman: Small towns now have a larger voice in the MPO; trust established between local governments; NCDOT Board member and Division 7 Office are very helpful and engaged in the process; PART is a valuable partner; money is tight, but MPO doing more with less.
9. Kasandra Hart, resident: Greensboro Transit Administration (GTA) fares are rising, but there have been cutbacks to service and headways are increasing; buses are too crowded; transfers cause riders to have to change plans if the bus is late.
10. Missie Hingle, resident: GTA needs increased funding; ridership has increased and additional funding would help provide additional services.



Appendix E

Glossary of Acronyms

AADT -	Average Annual Daily Traffic
BOT -	Board of Transportation
BRT -	Bus Rapid Transit
3C –	Continuing, Cooperative, Comprehensive Planning Process
CFR -	Code of Federal Regulations
CMAQ -	Congestion Mitigation and Air Quality
CMP -	Congestion Management Program
CO -	Carbon Monoxide
CR -	Continuing Resolution
CRO -	Civil Rights Officer
CTP -	Comprehensive Transportation Plan
DOT -	Department of Transportation
DWQ -	Division of Water Quality
EA -	Environmental Assessment
EJ -	Environmental Justice
EPA -	Environmental Protection Agency
FHWA -	Federal Highway Administration
FTA -	Federal Transit Administration
GDOT -	Greensboro Department of Transportation
GIS -	Geographic Information System
GTA -	Greensboro Transit Authority



GUAMPO -	Greensboro Urban Area Metropolitan Planning Organization
HEAT -	Higher Education Area Transit
HSIP -	Highway Safety Improvement Program
HUD -	Housing and Urban Development
IC -	Interagency Consultation
ICG -	Interagency Consultation Group
ITS -	Intelligent Transportation Systems
LEED -	Leadership in Energy and Environmental Design
LEP -	Limited English Proficiency
LOS -	Level of Service
LPA -	Lead Planning Agency
M&O -	Management and Operations
MAP-21 -	Moving Ahead for Progress in the 21 st Century Act
MLI -	Minority and Low Income
MOA -	Memorandum of Agreement
MOU -	Memorandum of Understanding
MPA -	Metropolitan Planning Area
MPO -	Metropolitan Planning Organization
MTP -	Metropolitan Transportation Plan
NCAMPO -	North Carolina Association of Metropolitan Planning Organizations
NCDOT -	North Carolina Department of Transportation
NCPTA -	North Carolina Public Transportation Association
NEPA -	National Environmental Policy Act
NHI -	National Highway Institute
NTI -	National Transit Institute



O&M -	Operation and Management
PART -	Piedmont Authority for Regional Transportation
PCR -	Planning Certification Review
PL -	Planning Funds
PM -	Particulate Matter
PPP -	Public Participation Policy
PTD -	Public Transit Division
PTRC -	Piedmont Triad Regional Council
RCTO -	Regional Concept for Transportation Operations
SAFETEA-LU -	Safe Accountable Flexible Efficiency Transportation Equity Act – A Legacy for Users
SHSP -	Strategic Highway Safety Plan
SICM -	Statewide Interagency Consultation Meeting
SOV -	Single Occupancy Vehicle
SPOT -	Strategic Prioritization on Transportation
STIP -	State Transportation Improvement Program
STP-DA -	Surface Transportation Program – Direct Allocation
TAC -	Transportation Advisory Committee
TCC -	Technical Coordinating Committee
TDM -	Transit Development Plan
TEAM -	Transportation Electronic Award and Management
TIP -	Transportation Improvement Program
TMA -	Transportation Management Area
TPB -	Transportation Planning Branch
UPWP -	Unified Planning Work Program



USC -	United States Code
USDOT -	United States Department of Transportation
USFW -	United States Fish and Wildlife
V/C Ratio -	Volume to Capacity Ratio
YOE -	Year of Expenditure

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**Federal Highway
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